

REMARKS

Claims 1-2 and 4-25 were pending as of the action mailed on May 28, 2009. Claims 1 and 25 are in independent form. Claims 1 and 25 are amended for clarity. Support for the amendments can be found in the specification, for example, at page 5, lines 7-10. This response is being filed with a Request for Continued Examination.

Reconsideration of the action is respectfully requested in light of the foregoing amendments and the following remarks.

The Examiner rejected claims 1-2, and 4-25 under 35 U.S.C. § 112 as allegedly being indefinite.

The Examiner rejected claims 1, 4-8, 17-20, and 23-24 under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent Application Publication No. 2003/0037151 (“Montvay”) in view of U.S. Patent Application Publication No. 2003/0009520 (“Nourbakhsh”) and U.S. Patent No. 5,978,785 (“Johnson”). The Examiner rejected claims 2, 9-16, and 21-22 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Montvay in view of Nourbakhsh and U.S. Patent Application Publication No. 2002/0118954 (“Barton”). The Examiner rejected claims 1 and 25 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Montvay in view of U.S. Patent No. 7,283,970 (“Cragun”) and Johnson.

Applicant respectfully traverses the rejections.

Section 112 Rejections

Claims 1 and 25 were rejected as indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Specifically, the Examiner stated that it is not clear what the relationship is between “one or more solutions” and “a transmission schedule”. Applicant respectfully disagrees. Claims 1 and 25 do not recite “a transmission schedule”. Applicant respectfully requests that the Examiner clarify the basis of the rejection.

Moreover, the Examiner states that it is unclear what a “solution” is. Applicant respectfully disagrees. A solution is clearly described in the specification. Moreover, claim 1, as

amended recites that a solution is determined for each of the plurality of jobs based on a program schedule where each non-null solution requires a set of resources over a set of intervals for recording the corresponding job of the plurality of jobs. Applicant respectfully submits that a solution is clear from the claim language and the specification and requests that the section 112 rejection be withdrawn.

Section 103 Rejections

Claim 1

Claim 1 was rejected over Montvay, Nourbakhsh, and Johnson. Claim 1 recites scoring each plan of the plurality of plans, where scoring each plan includes determining whether the plan includes a null solution to a job where the null solution to a job is a solution in which the job is not recorded and if so modifying the score for the plan based on having the null solution.

The Examiner states that Montvay does not specifically teach assigning scores to the one or more plans, but that Nourbakhsh does teach this feature at paragraph 20. Applicant respectfully disagrees.

Nourbakhsh generally describes a technique for scheduling work schedules for employees at a call center in an efficient manner based on expected call loads and call types. *See* paragraph 2. Specifically, paragraph 20 of Nourbakhsh reads as follows:

At 204, scheduling software receives the scheduling data. The scheduling software is an existing tool for analyzing the scheduling data and generating scheduling constraints, including workload forecasts and service goals. The scheduling constraints are sent to a search engine at 206. The search engine generates potential schedules for analysis. At 208, analysis of schedules for deferred queues is performed to produce estimated service levels for the deferred queues according to the potential schedule that was analyzed. The analysis of 208 is performed using a forward-push discrete event modeler which estimates PCA for deferred queues given the workload and capacity in any given interval within the schedule period. PCA for deferred queues is used by the agent requirement scoring function at 210, along with service goals, to produce an agent requirement score. The analysis of 208 will be described more fully [sic] with reference to FIG. 4. The agent requirement score is used by the search engine 206 to evaluate the schedule. A schedule with the highest agent requirement score of all of the analyzed schedules is output as an “optimal” schedule to the user interface 202.

The flow of FIG. 2 produces an optimal schedule, including optimal schedules for deferred queues as measured by traditional metrics used for immediate queues.

Paragraph 20 describes generating work schedules for estimated services levels. These work schedules are evaluated with respect to a score based on an agents available formula and an agents required formula. *See* paragraphs 26-27.

Scoring work schedules, however, does not teach or suggest scoring each plan of a plurality of plans. Claim 1 requires that each plan has a combination of solutions where the solutions are determined for each job of a plurality of jobs based on a program schedule. The Examiner has simply found a reference that teaches scoring something, but not scoring the claimed plans. Applicant respectfully asserts that identifying a score in the abstract does not teach or suggest the claimed scoring of a plan where a plan has a combination of solutions to jobs based on a program schedule. The cited portion of Nourbakhsh does not teach or suggest scoring any plans as recited in claim 1.

Furthermore, the Examiner states that Montvay teaches determining one or more solutions for each job of the plurality of jobs based on a program schedule at paragraph 66. Applicant respectfully disagrees. Applicant further notes that the rejection fails to reject the current claim language, instead referring to a “transmission schedule”. Paragraph 66 of Montvay reads as follows:

[0066] 2. It is defined precisely which parts of the data flowchart are in conflict, that is to say, for example, two requests relate to the unit X over the time interval Y.

The cited portion makes no mention of a program schedule or determining solutions based on a program schedule. Instead, the cited portion simply defines a conflict between parts of a data flowchart. Applicant respectfully submits that the cited portion of Montvay does not teach or suggest determining one or more solutions for each job of the plurality of jobs based on a program schedule, as required by claim 1.

The Examiner further states that while Montvay and Nourbakhsh fail to teach that scoring each plan includes determining whether the plan includes a null solution to a job and if so modifying the score for the plan based on having the null solution, Johnson does at col. 23, lines 46-55. Applicant respectfully disagrees.

Johnson generally describes an object-oriented programming system that allows a user to develop a case base having case histories. *See* Abstract. The case base generates a case-based reasoning system that receives user requests for query solutions and produces a query solution that can be incorporated into the case base. *See id.*

In particular, col. 23, lines 46-55 reads as follows:

If no solution was found, a negative outcome at the decision box numbered 202, then the CBR system ranks the properties by computing a property values score to guide the user in providing additional information. The user may execute prompts to aid in this. This processing is represented by the flow diagram box numbered 208. The property values score permits the user to determine which additional information would be of the most benefit in finding a solution. The PresentationComponent is the mechanism through which additional priority values are obtained from the user.

The cited portion of Johnson refers to determining whether or not a case in the case base is a sufficiently close match to a query. *See* col. 23, lines 23-27. If there is a match, then the case is designated as a solution. *See id.* Specifically, the cited portion of Johnson refers to the situation where there is no solution, which means that there is no matching case in the case base. When there is no solution, the user is allowed to modify properties of the query based on their respective scores in order to increase the likelihood of identifying a solution. *See* col. 23, lines 23-27.

Identifying that no solution to a query exists does not teach or suggest scoring each plan of the plurality of plans, where scoring each plan includes determining whether the plan includes a null solution to a job where the null solution to a job is a solution in which the job is not recorded and if so modifying the score for the plan based on having the null solution. The cited portion of Johnson does not refer to a null solution for a job in a plan having a combination of solutions where the null solution for a particular job is a solution where the job is not recorded. Instead, the cited portion of Johnson refers to there being no solution at all to a query. Consequently, there is no teaching or suggesting in the cited portion of Johnson that when there is a null solution the score for the plan is modified based on having the null solution, as required by claim 1.

Applicant respectfully submits that claim 1 is allowable over the cited portions of Montvay, Nourbakhsh, and Johnson.

The Examiner also rejected claim 1 over Montvay, Cragun, and Johnson. As stated previously, claim 1 is directed to a method that includes scoring each plan of a plurality of plans, where scoring each plan of the plurality of plans, where scoring each plan includes determining whether the plan includes a null solution to a job where the null solution to a job is a solution in which the job is not recorded and if so modifying the score for the plan based on having the null solution.

The Examiner relies on Cragun to teach scoring plans at col. 4, lines 34-45; col. 5, lines 45-55, and col. 6, lines 15-34. Applicant respectfully disagrees. Cragun generally describes an electronic calendar meeting scheduling program for rescheduling meetings. *See* col. 4, lines 21-51. Specifically, col. 4, lines 34-45 read as follows:

In accordance with features of the preferred embodiment, additional capability over known calendaring systems is provided to automatically reschedule and renegotiate meetings, for example, when a new meeting absolutely must be fit into different busy schedules. Existing meetings are given a movability rating that defines how difficult is it to move a particular meeting. Several factors are involved, including how many people are involved in the move, availability and location of resources for the meeting, how soon the meeting must occur, and the importance of certain attendees, such as, executives or the person who called the meeting or the meeting's owner. A target time for the new or rescheduled meeting is found based on a least cost of moving other existing meetings. A temporary placeholder is provided or put in place to reserve space for a new meeting. The other meetings already in the target time are moved and notifications are sent to the attendees. Alternatively, meeting settings may require attendee approval before the other meetings are moved. If so, approvals are gathered. The new meeting is placed and confirmations are sent. An option allows notification by e-mail, phone or pager; for example, if change occurs on same day.

The cited portion of Cragun describes determining a likelihood that a singular meeting could be rescheduled to accommodate all necessary parties. Information regarding the meeting as it stands are saved to determine a new schedule. *See* col. 4, lines 52-62. The meeting can be shortened or lengthened to accommodate different parties, and each meeting is planned separately. *See* col. 5, line 33 to col. 6, line 34.

The meetings of Cragun are distinct from the claimed plans. As set forth above, each plan has a combination of solutions to jobs based on a program schedule. Cragun does not teach or suggest scoring a plan as claimed. Instead, Cragun describes rating meetings. Assigning meetings a movability rating that defines how difficult it is to move a particular meeting does not teach or suggest scoring the claimed plans. Applicant respectfully submits that identifying a score or rating in the abstract does not teach or suggest the claimed scoring of a plan where a plan has a combination of solutions to jobs based on a program schedule.

Additionally, the Examiner relies on the same portion of Johnson identified above as teaching the claimed determining whether the plan includes a null solution to a job and if so modifying the score for the plan based on having the null solution. As set forth above, the cited portion of Johnson fails to teach or suggest the claimed determining.

Applicant respectfully submits that claim 1 is allowable over the cited portions of Montvay, Cragun, and Johnson.

Claims 2 and 4-24 depend from claim 1 and are allowable for at least the same reasons.

Claim 25

Claim 25 was rejected over, alternatively, Montvay, Nourbakhsh, and Johnson and Montvay, Cragun, and Johnson. Claim 25 is directed to a method that includes resolving the scheduling conflict including automatically determining one or more plans for performing jobs, each plan having a combination of solutions including a particular solution for each of the plurality of jobs, wherein resources used by the plurality of jobs for the combination of solutions in each plan are less than or equal to the number of resources available at each interval, where determining each plan includes scoring each job of the plurality of jobs and identifying a high scoring solution for a first job of the plurality of jobs and identifying solutions for each other job of the plurality of jobs compatible with the high scoring solution of the first job, where scoring each plan of the plurality of plans, where scoring each plan includes determining whether the plan includes a null solution to a job where the null solution to a job is a solution in which the job is not recorded and if so modifying the score for the plan based on having the null solution.

Applicant respectfully submits that claim 25 is allowable for at least the same reasons as claim 1.

Claim 18

Claim 18 was rejected over Montvay, Nourbakhsh, and Johnson. Claim 18 is directed to filtering the one or more plans including keeping a first plan for presentation to a user and ignoring a second plan so that the second plan is not presented to the user.

The Examiner states that Montvay teaches the features of claim 18 at paragraphs 68-70. Applicant respectfully disagrees. Paragraphs 68-70 describe steps 4-6 of a conflict resolution process. Specifically, paragraph 68 describes categorizing feasible operations based only on currently available information. Paragraph 69 describes examination of multiple solutions to find a “good proposal”. Paragraph 70 describes that searching can continue after an acceptable proposal has been found.

None of the cited paragraphs, however, teach or suggest filtering plans including keeping one plan for presentation to a user and ignoring a second plan that is not presented to the user. Applicant respectfully submits that claim 18, as well as claim 19, which depends from claim 18, are in condition for allowance.

Conclusion

For the foregoing reasons, Applicant submits that all the claims are in condition for allowance.

By responding in the foregoing remarks only to particular positions taken by the Examiner, the applicant does not acquiesce with other positions that have not been explicitly addressed. In addition, Applicant’s selecting some particular arguments for the patentability of a claim should not be understood as implying that no other reasons for the patentability of that claim exist. Finally, Applicant’s decision to amend or cancel any claim should not be understood as implying that Applicant agrees with any positions taken by the Examiner with respect to that claim or other claims.

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The RCE fee is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply any other credits or charges to Deposit Account No. 06-1050.

Respectfully submitted,

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